#### Patent claims

### 1. Compounds of the formula (I)

in which

A and B together with the carbon atom to which they are attached represent a saturated or unsaturated C<sub>3</sub>-C<sub>8</sub> ring which optionally contains at least one heteroatom and which is optionally substituted,

and

G represents one of the groups

$$R^{1}$$
 (b),  $R^{2}$  (c),  $SO_{2}$   $R^{3}$  (d),  $R^{6}$   $R^{5}$  (e),  $E$  (f) or  $R^{7}$  (g)

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- E represents a metal ion equivalent or an ammonium ion,
- L represents oxygen or sulphur,
- M represents oxygen or sulphur,
- 15 R<sup>1</sup> represents in each case optionally substituted alkyl, alkenyl, alkoxyalkyl, alkylthioalkyl or polyalkoxyalkyl or represents in each case halogen-, alkyl- or alkoxy-substituted cycloalkyl or heterocyclyl or represents in each case optionally substituted phenyl or hetaryl,

R<sup>2</sup> represents in each case halogen-substituted alkyl, alkenyl, alkoxyalkyl or polyalkoxyalkyl or represents in each case optionally substituted cycloalkyl, phenyl or benzyl,

R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> independently of one another represent in each case optionally halogensubstituted alkyl, alkoxy, alkylamino, dialkylamino, akylthio, alkenylthio or cycloalkylthio or represent in each case optionally substituted phenyl, benzyl, phenoxy or phenylthio,

R<sup>6</sup> and R<sup>7</sup> independently of one another represent hydrogen, represent in each case optionally halogen-substituted alkyl, cycloalkyl, alkenyl, alkoxy, alkoxyalkyl, or represent in each case optionally substituted phenyl or benzyl, or together with the N atom to which they are attached represent an optionally substituted cycle which optionally contains oxygen or sulphur.

2. Compounds of the formula (I) according to Claim 1,

in which

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A, B and the carbon atom to which they are attached represent saturated C<sub>3</sub>-C<sub>8</sub>-cycloalkyl or unsaturated C<sub>5</sub>-C<sub>8</sub>-cycloalkyl in which optionally one methylene group is replaced by oxygen or sulphur and which is optionally substituted by C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl or C<sub>1</sub>-C<sub>6</sub>-alkoxy,

G represents one of the groups

in which

E represents a metal ion equivalent or an ammonium ion,

L represents oxygen or sulphur and

M represents oxygen or sulphur,

 $R^1$ represents C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>2</sub>-C<sub>20</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkoy-C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio-C<sub>1</sub>-C<sub>6</sub>-alkyl or poly-C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, each of which is optionally mono- to heptasubstituted by halogen, mono- or disubstituted by cyano, monosubstituted by COR<sup>13</sup>, C=N-OR<sup>13</sup>, CO<sub>2</sub>R<sup>13</sup> or CON $\stackrel{R}{\sim}_{R^{13}}$  or represents C<sub>3</sub>-C<sub>8</sub>-cycloalkyl which is 5 optionally mono- to trisubstituted by halogen, C1-C4-alkyl or C1-C4-alkoxy and in which optionally one or two not directly adjacent methylene groups are replaced by oxygen and/or sulphur, represents phenyl, phenyl-C<sub>1</sub>-C<sub>2</sub>-alkyl or phenyl-C<sub>1</sub>-C<sub>2</sub>-alkenyl, each of which is optionally mono- to trisubstituted by halogen, cyano, nitro, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-10 alkoxy, C<sub>1</sub>-C<sub>6</sub>-haloalkyl, C<sub>1</sub>-C<sub>6</sub>-haloalkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulphinyl or  $C_1$ - $C_6$ -alkylsulphonyl, represents 5- or 6-membered hetaryl which is optionally mono- or disubstituted by halogen or C<sub>1</sub>-C<sub>6</sub>-alkyl and which contains one or two heteroatoms from the group consisting of oxygen, sulphur and nitrogen,  $R^2$ 15 represents C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>2</sub>-C<sub>20</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy-C<sub>2</sub>-C<sub>6</sub>-alkyl or poly-C<sub>1</sub>-C<sub>6</sub>alkoxy-C2-C6-alkyl, each of which is optionally mono- to trisubstituted by halogen, represents C<sub>3</sub>-C<sub>8</sub>-cycloalkyl which is optionally mono- or disubstituted by halogen, C<sub>1</sub>-C<sub>6</sub>-alkyl or C<sub>1</sub>-C<sub>6</sub>-alkoxy or represents phenyl or benzyl, each of which is optionally mono- to trisubstituted by 20 halogen, cyano, nitro, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-haloalkyl or C<sub>1</sub>-C<sub>6</sub>haloalkoxy,  $\mathbb{R}^3$ represents C<sub>1</sub>-C<sub>8</sub>-alkyl which is optionally mono- or polysubstituted by halogen or represents phenyl or benzyl, each of which is optionally mono- or disubstituted by halogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkoxy, cyano or 25 nitro.

R<sup>4</sup> and R<sup>5</sup> independently of one another represent C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy, C<sub>1</sub>-C<sub>8</sub>-alkylamino, di(C<sub>1</sub>-C<sub>8</sub>-alkyl)amino, C<sub>1</sub>-C<sub>8</sub>-alkylthio or C<sub>2</sub>-C<sub>8</sub>-alkenylthio, each of which is optionally mono- to trisubstituted by halogen, or represent phenyl, phenoxy or phenylthio, each of which is optionally mono- to trisubstituted by halogen, nitro, cyano, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-haloalkoxy, C<sub>1</sub>-C<sub>4</sub>-alkylthio, C<sub>1</sub>-C<sub>4</sub>-haloalkyl,

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R<sup>6</sup> and R<sup>7</sup> independently of one another represent hydrogen, represent C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>3</sub>-C<sub>8</sub>-cycloalkyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy, C<sub>3</sub>-C<sub>8</sub>-alkenyl or C<sub>1</sub>-C<sub>8</sub>-alkoxy-C<sub>2</sub>-C<sub>8</sub>-alkyl, each of which is optionally mono- to trisubstituted by halogen, represent phenyl or benzyl, each of which is optionally mono- to trisubstituted by halogen, C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-haloalkyl or C<sub>1</sub>-C<sub>8</sub>-alkoxy, or together represent a C<sub>3</sub>-C<sub>6</sub>-alkylene radical which is optionally mono- or disubstituted by C<sub>1</sub>-C<sub>4</sub>-alkyl and in which optionally one methylene group is replaced by oxygen or sulphur,

R<sup>13</sup> represents C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-alkenyl, C<sub>3</sub>-C<sub>6</sub>-alkynyl or C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>2</sub>-C<sub>4</sub>-alkyl, each of which is optionally mono- to trisubstituted by halogen, or represents C<sub>3</sub>-C<sub>6</sub>-cycloalkyl which is optionally mono- or disubstituted by halogen, C<sub>1</sub>-C<sub>2</sub>-alkyl or C<sub>1</sub>-C<sub>2</sub>-alkoxy and in which optionally one or two not directly adjacent methylene groups are replaced by oxygen, or represents phenyl or phenyl-C<sub>1</sub>-C<sub>2</sub>-alkyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>2</sub>-haloalkyl, C<sub>1</sub>-C<sub>2</sub>-haloalkoxy, cyano or nitro,

15 R<sup>13'</sup> represents hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl or C<sub>3</sub>-C<sub>6</sub>-alkenyl.

- 3. Compounds of the formula (I) according to Claim 1, in which
  - A, B and the carbon atom to which they are attached represent saturated C<sub>3</sub>-C<sub>7</sub>-cycloalkyl in which optionally one methylene group is replaced by oxygen and which is optionally mono- or disubstituted by C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>2</sub>-haloalkyl or C<sub>1</sub>-C<sub>4</sub>-alkoxy,
  - G represents one of the groups

- E represents a metal ion equivalent or an ammonium ion,
- 25 L represents oxygen or sulphur and

M represents oxygen or sulphur,

R<sup>1</sup> represents C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkylthio-C<sub>1</sub>-C<sub>2</sub>-alkyl or poly-C<sub>1</sub>-C<sub>3</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl, each of which is optionally mono- to pentasubstituted by fluorine or chlorine, monosubstituted by cyano, monosubstituted by CO-R<sup>13</sup>, C=N-OR<sup>13</sup> or CO<sub>2</sub>R<sup>13</sup>, or represents C<sub>3</sub>-C<sub>6</sub>-cycloalkyl which is optionally mono- or disubstituted by fluorine, chlorine, C<sub>1</sub>-C<sub>2</sub>-alkyl or C<sub>1</sub>-C<sub>2</sub>-alkoxy and in which optionally one or two not directly adjacent methylene groups are replaced by oxygen,

represents phenyl or benzyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine, cyano, nitro, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkylthio, C<sub>1</sub>-C<sub>4</sub>-sulphalkylnyl, C<sub>1</sub>-C<sub>4</sub>-alkylsulphonyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>2</sub>-haloalkyl or C<sub>1</sub>-C<sub>2</sub>-haloalkoxy,

represents pyrazolyl, thiazolyl, pyridyl, pyrimidyl, furanyl or thienyl, each of which is mono- or disubstituted by fluorine, chlorine, bromine or  $C_1$ - $C_2$ -alkyl,

R<sup>2</sup> represents C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>2</sub>-C<sub>4</sub>-alkyl or poly-C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>2</sub>-C<sub>4</sub>-alkyl, each of which is optionally mono- to trisubstituted by fluorine or chlorine,

represents  $C_3$ - $C_7$ -cycloalkyl which is optionally monosubstituted by  $C_1$ - $C_2$ -alkyl or  $C_1$ - $C_2$ -alkoxy or

represents phenyl or benzyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine, cyano, nitro, C<sub>1</sub>-C<sub>4</sub>-alkyl, methoxy, trifluoromethyl or trifluoromethoxy,

R<sup>3</sup> represents C<sub>1</sub>-C<sub>4</sub>-alkyl which is optionally mono- to trisubstituted by fluorine or chlorine or represents phenyl or benzyl, each of which is optionally monosubstituted by fluorine, chlorine, bromine, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, trifluoromethyl, trifluoromethoxy, cyano or nitro,

R<sup>4</sup> and R<sup>5</sup> independently of one another represent C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, di(C<sub>1</sub>-C<sub>6</sub>-alkyl)amino, C<sub>1</sub>-C<sub>6</sub>-alkylthio or C<sub>3</sub>-C<sub>4</sub>-alkenylthio, each of which is optionally mono- to trisubstituted by fluorine or chlorine, or represent phenyl, phenoxy or phenylthio, each of which is optionally mono- or disubstituted by

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fluorine, chlorine, bromine, nitro, cyano,  $C_1$ - $C_3$ -alkoxy, trifluoromethoxy,  $C_1$ - $C_3$ -alkylthio,  $C_1$ - $C_3$ -alkyl or trifluoromethyl,

R<sup>6</sup> and R<sup>7</sup> independently of one another represent hydrogen, represent C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>3</sub>-C<sub>6</sub>-alkenyl or C<sub>1</sub>-C<sub>6</sub>-alkoxy-C<sub>2</sub>-C<sub>6</sub>-alkyl, each of which is optionally mono- to trisubstituted by fluorine or chlorine, represent phenyl which is optionally mono- or disubstituted by fluorine, chlorine, bromine, trifluoromethyl, C<sub>1</sub>-C<sub>4</sub>-alkyl or C<sub>1</sub>-C<sub>4</sub>-alkoxy, or together represent a C<sub>5</sub>-C<sub>6</sub>-alkylene radical which is optionally mono- or disubstituted by methyl and in which optionally one methylene group is replaced by oxygen,

10 R<sup>13</sup> represents C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>3</sub>-C<sub>4</sub>-alkenyl, C<sub>3</sub>-C<sub>4</sub>-alkynyl or C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>2</sub>-C<sub>3</sub>-alkyl or represents C<sub>3</sub>-C<sub>6</sub>-cycloalkyl in which optionally one methylene group is replaced by oxygen.

- 4. Compounds of the formula (I) according to Claim 1 in which
- A, B and the carbon atom to which they are attached represent saturated C<sub>6</sub>-cycloalkyl in which optionally one methylene group is replaced by oxygen and which is optionally monosubstituted by methyl, ethyl, trifluoromethyl, methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy or isobutoxy,
  - G represents one of the groups

20 in which

- L represents oxygen and
- M represents oxygen or sulphur,
- R<sup>1</sup> represents C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>2</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl, C<sub>1</sub>-C<sub>2</sub>-alkylthio-C<sub>1</sub>-C<sub>2</sub>-alkyl or poly-C<sub>1</sub>-C<sub>2</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl, each of which is optionally mono- to trisubstituted by fluorine or chlorine, or represents cyclopropyl, cyclopentyl or cyclohexyl, each of which is optionally monosubstituted by fluorine, chlorine, methyl, ethyl or methoxy,

 $R^2$ 

represents phenyl which is optionally monosubstituted by fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, n-propyl, isopropyl, methoxy, ethoxy, methylthio, ethylthio, methylsulphinyl, ethylsulphinyl, methylsulphonyl, ethylsulphonyl, trifluoromethyl or trifluoromethoxy,

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represents furanyl, thienyl or pyridyl, each of which is optionally monosubstituted by chlorine, bromine or methyl,

represents C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl or C<sub>1</sub>-C<sub>3</sub>-alkoxy-C<sub>2</sub>-C<sub>3</sub>-alkyl, cyclopentyl or

or represents phenyl or benzyl, each of which is optionally monosubstituted by

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cyclohexyl,

fluorine, chlorine, bromine, cyano, nitro, methyl, methoxy, trifluoromethyl or trifluoromethoxy,

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- R<sup>3</sup> represents C<sub>1</sub>-C<sub>4</sub>-alkyl which is optionally mono- to trisubstituted by fluorine or chlorine, or represents phenyl or benzyl, each of which is optionally monosubstituted by fluorine, chlorine, bromine, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, trifluoromethyl, trifluoromethoxy, cyano or nitro,
- R<sup>6</sup> represents hydrogen, represents C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or allyl, represents phenyl which is optionally monosubstituted by fluorine, chlorine, bromine, methyl, methoxy or trifluoromethyl,
- R<sup>7</sup> represents methyl, ethyl, n-propyl, isopropyl or allyl,

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R<sup>6</sup> and R<sup>7</sup> together represent a C<sub>5</sub>-C<sub>6</sub>-alkylene radical in which optionally one methylene group is replaced by oxygen.

- 5. Compounds of the formula (I) according to Claim 1 in which
  - A, B and the carbon atom to which they are attached represent saturated  $C_6$ -cycloalkyl which is optionally monosubstituted by methyl, methoxy or n-propoxy,
- 25 G represents one of the groups

$$R^1$$
 (b),  $R^2$  (c) or  $SO_2-R^3$  (d)

- . L represents oxygen and
- M represents oxygen,
- R<sup>1</sup> represents C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>2</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl or cyclopropyl,
- $R^2$  represents  $C_1$ - $C_8$ -alkyl or  $C_2$ - $C_6$ -alkenyl,
- 5  $R^3$  represents  $C_1$ - $C_4$ -alkyl.
  - 6. Process for preparing compounds of the formula (I) according to Claim 1, characterized in that, to obtain
    - (A) compounds of the formula (I-b)

in which A, B and R<sup>1</sup> are as defined above, compounds of the formula (I-a)

in which

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A and B are as defined above,

\_ are reacted

α) with acid halides of the formula (II)

$$Hal \underset{O}{\bigvee} R^1 \qquad \qquad (II)$$

in which

R<sup>1</sup> is as defined above and

Hal represents halogen

or

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ß) with carboxylic anhydrides of the formula (III)

$$R^1$$
-CO-O-CO- $R^1$  (III)

in which

R<sup>1</sup> is as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

(C) compounds of the formula (I-c)

in which A, B, R<sup>2</sup> and M are as defined above and L represents oxygen, compounds of the formula (I-a) shown above in which A and B are as defined above are in each case reacted

with chloroformic esters or chloroformic thioesters of the formula (IV)

$$R^2$$
-M-CO-Cl (IV)

R<sup>2</sup> and M are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

### (D) compounds of the formula (I-c)

in which

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A, B, R<sup>2</sup> and M are as defined above and L represents sulphur, compounds of the formula (I-a) shown above in which A and B are as defined above are in each case reacted

10 α) with chloromonothioformic esters or chlorodithioformic esters of the formula (V)

$$CI \longrightarrow M-R^2$$
 (V)

in which

M and R<sup>2</sup> are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

or

B) with carbon disulphide and then with compounds of the formula (VI)

R<sup>2</sup> is as defined above and

Hal represents chlorine, bromine or iodine,

if appropriate in the presence of a diluent and if appropriate in the presence of a base,

# (E) compounds of the formula (I-d)

in which A, B and R<sup>3</sup> are as defined above, compounds of the formula (I-a) shown above in which A and B are as defined above are in each case reacted

with sulphonyl chlorides of the formula (VII),

$$R^3$$
-SO<sub>2</sub>-Cl (VII)

in which

R<sup>3</sup> is as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

### (F) compounds of the formula (I-e)

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in which A, B, L, R<sup>4</sup> and R<sup>5</sup> are as defined above, compounds of the formula (I-a) shown above in which A and B are as defined above are in each case

reacted with phosphorus compounds of the formula (VIII)

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in which

L, R<sup>4</sup> and R<sup>5</sup> are as defined above and

Hal represents halogen,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

10 (G) compounds of the formula (I-f)

$$\begin{array}{c|c} A & H \\ \hline B & N & O \\ \hline E-O & C_2H_5 \\ \hline H_3C & CH_3 \end{array} \qquad (I-f)$$

in which A, B and E are as defined above, compounds of the formula (I-a) shown above in which A and B are as defined above are in each case reacted

with metal compounds or amines of the formulae (IX) and (X), respectively,

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$$R^{10} R^{10}$$
, (IX)  $R^{11}$  (X)

in which

Me represents a mono- or divalent metal,

t represents a number 1 or 2 and

R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> independently of one another represent hydrogen or alkyl,

if appropriate in the presence of a diluent,

# (H) compounds of the formula (I-g)

in which A, B, L, R<sup>6</sup> and R<sup>7</sup> are as defined above, compounds of the formula (I-a) shown above in which A and B are as defined above are in each case reacted

a) with isocyanates or isothiocyanates of the formula (XI)

$$R^6-N=C=L$$
 (XI)

in which

R<sup>6</sup> and L are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of a catalyst, or

ß) with carbamoyl chlorides or thiocarbamoyl chlorides of the formula (XII)

$$R^6$$
 N CI (XII)

in which

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L,  $R^6$  and  $R^7$  are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder.

- 7. Use of compounds of the formula (I) according to Claim 1 for preparing pesticides and herbicides.
- 8. Pesticides and herbicides, characterized in that they comprise at least one compound of the formula (I) according to Claim 1.
- Method for controlling animal pests and unwanted vegetation, characterized in that compounds of the formula (I) are allowed to act on pests and/or their habitats.
  - 10. Use of compounds of the formula (I) according to Claim 1 for controlling animal pests and unwanted vegetation.
- Process for preparing pesticides and herbicides, characterized in that compounds of the formula (I) according to Claim 1 are mixed with extenders and/or surfactants.
  - 12. Compositions, comprising an effective amount of a combination of active compounds comprising
    - a') at least one substituted cyclic ketoenol of the formula (I) according to Claim 1 in which A, B and G are as defined above,

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b') at least one substituted cyclic ketoenol of the formula (I-a)

in which

A and B are as defined above, and

20 c') at least one crop plant compatibility-improving compound from the following group of compounds:

4-dichloroacetyl-1-oxa-4-azaspiro[4.5]decane (AD-67, MON-4660), 1-dichloroacetyl-hexahydro-3,3,8a-trimethylpyrrolo[1,2-a]pyrimidin-6(2H)-one (dicyclonon, BAS-145138), 4-dichloroacetyl-3,4-dihydro-3-methyl-2H-1,4-benzoxazine (benoxacor), 1-methylhexyl

5-chloroquinoline-8-oxyacetate (cloquintocet-mexyl - cf. also related compounds in EP-A-86750, EP-A-94349, EP-A-191736, EP-A-492366), 3-(2-chlorobenzyl)-1-(1-methyl-1-phenylethyl)urea (cumyluron), α-(cyanomethoximino)phenylacetonitrile (cyometrinil), 2,4-dichlorophenoxyacetic acid (2,4-D), 4-(2,4-dichlorophenoxy)butyric acid (2,4-DB), 1-(1-methyl-1-phenylethyl)-3-(4-methylphenyl)urea (daimuron, dymron), 3,6-dichloro-2-methoxybenzoic acid (dicamba), S-1-methyl 1-phenylethyl piperidine-1-thiocarboxylate (dimepiperate), 2,2-dichloro-N-(2-oxo-2-(2-propenylamino)ethyl)-N-(2-propenyl)acetamide (DKA-24), 2,2-dichloro-N,N-di-2-propenylacetamide (dichlormid), 4,6-dichloro-2-phenylpyrimidine (fenclorim), ethyl 1-(2,4-dichlorophenyl)-5-trichloromethyl-1H-1,2,4-triazole-3-carboxylate (fenchlorazole-ethyl - cf. also related compounds in EP-A-174562 and EP-A-346620), phenylmethyl 2-chloro-4-trifluoromethylthiazole-5-carboxylate (flurazole), 4-chloro-N-(1,3-dioxolan-2-ylmethoxy)-α-trifluoroacetophenone oxime (fluxofenim), 3-dichloroacetyl-5-(2-furanyl)-2,2-dimethyloxazolidine (furilazole, MON-13900), ethyl 4,5-dihydro-5,5-diphenyl-3-isoxazolecarboxylate (isoxadifen-ethyl -cf. also related compounds in WO-A-95/07897), 1-(ethoxycarbonyl)ethyl 3,6-dichloro-2methoxybenzoate (lactidichlor), (4-chloro-o-tolyloxy)acetic acid (MCPA), 2-(4-chloro-otolyloxy)propionic acid (mecoprop), diethyl 1-(2,4-dichlorophenyl)-4,5-dihydro-5-methyl-1H-pyrazole-3,5-dicarboxylate (mefenpyr-diethyl - cf. also related compounds in WO-A-91/07874), 2-dichloromethyl-2-methyl-1,3-dioxolane (MG-191), 2-propenyl 1-oxa-4azaspiro[4.5]decane-4-carbodithioate (MG-838), 1,8-naphthalic anhydride, dioxolan-2-ylmethoximino)phenylacetonitrile (oxabetrinil), 2,2-dichloro-N-(1,3-dioxolan-2-ylmethyl)-N-(2-propenyl)acetamide (PPG-1292), 3-dichloroacetyl-2,2-dimethyloxazolidine (R-28725), 3-dichloroacetyl-2,2,5-trimethyloxazolidine (R-29148), 4-(4-chloro-o-tolyl)butyric acid, 4-(4-chlorophenoxy)butyric acid, diphenylmethoxyacetic acid. methyl ethyl diphenylmethoxyacetate, diphenylmethoxyacetate, methyl 1-(2-chlorophenyl)-5-phenyl-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5methyl-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-isopropyl-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-(1,1-dimethylethyl)-1H-pyrazole-3carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-phenyl-1H-pyrazole-3-carboxylate (cf. also related compounds in EP-A-269806 and EP-A-333131), ethyl 5-(2,4-dichlorobenzyl)-2isoxazoline-3-carboxylate. ethyl 5-phenyl-2-isoxazoline-3-carboxylate, 5-(4-fluorophenyl)-5-phenyl-2-isoxazoline-3-carboxylate (cf. also related compounds in WO-A-91/08202), 1,3-dimethylbut-1-yl 5-chloroquinoline-8-oxyacetate, 4-allyloxybutyl 5-chloroquinoline-8-oxyacetate. 1-allyloxyprop-2-yl 5-chloroquinoline-8-oxyacetate, methyl 5-chloroquinoxaline-8-oxyacetate, ethyl 5-chloroquinoline-8-oxyacetate, allyl 5-chloroquinoxaline-8-oxyacetate, 2-oxoprop-1-yl 5-chloroquinoline-8-oxyacetate, diethyl

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5-chloroquinoline-8-oxymalonate, diallyl 5-chloroquinoxaline-8-oxymalonate, diethyl 5-chloroquinoline-8-oxymalonate (cf. also related compounds in EP-A-582198), 4-carboxychroman-4-ylacetic acid (AC-304415, cf. EP-A-613618), 4-chlorophenoxyacetic acid, 3,3'-dimethyl-4-methoxybenzophenone, 1-bromo-4-chloromethylsulphonylbenzene, 1-[4-(N-2-methoxybenzoylsulphamoyl)phenyl]-3-methylurea (also known as N-(2-methoxybenzoyl)-4-[(methylaminocarbonyl)amino]benzenesulphonamide), 1-[4-(N-2-methoxybenzoylsulphamoyl)phenyl]-3,3-dimethylurea, 1-[4-(N-4,5-dimethylbenzoylsulphamoyl)phenyl]-3-methylurea, 1-[4-(N-naphthylsulphamoyl)phenyl]-3,3-dimethylurea, N-(2-methoxy-5-methylbenzoyl)-4-(cyclopropylaminocarbonyl)benzenesulphonamide,

and/or one of the following compounds, defined by general formulae, of the general formula (IIa)

$$(X^1)_m$$
  $A^1$   $B^{14}$  (IIa)

or of the general formula (IIb)

$$X^3$$
 $X^2$ 
 $A^2$ 
 $R^{15}$ 
(IIb)

or of the formula (IIc)

$$R^{16} \xrightarrow{\bigvee_{\mathbf{R}^{18}}} R^{17}$$
 (IIc)

where

m represents a number 0, 1, 2, 3, 4 or 5,

20 A<sup>1</sup> represents one of the divalent heterocyclic groupings shown below,

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- n represents a number 0, 1, 2, 3, 4 or 5,
- A<sup>2</sup> represents optionally C<sub>1</sub>-C<sub>4</sub>-alkyl- and/or C<sub>1</sub>-C<sub>4</sub>-alkoxy-carbonyl- and/or C<sub>1</sub>-C<sub>4</sub>-alkenyloxy-carbonyl-substituted alkanediyl having 1 or 2 carbon atoms,
- 5 R<sup>14</sup> represents hydroxyl, mercapto, amino, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino or di(C<sub>1</sub>-C<sub>4</sub>-alkyl)amino,
  - R<sup>15</sup> represents hydroxyl, mercapto, amino, C<sub>1</sub>-C<sub>7</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkenyloxy, C<sub>1</sub>-C<sub>6</sub>-alkenyloxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino or di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino,
- 10 R<sup>16</sup> represents in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl,
  - R<sup>17</sup> represents hydrogen, in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl or C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, dioxolanyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, furyl, furyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, thienyl, thiazolyl, piperidinyl, or optionally fluorine-, chlorine- and/or bromine- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted phenyl,
  - represents hydrogen, in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl or C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, dioxolanyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, furyl, furyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, thienyl, thiazolyl, piperidinyl, or optionally fluorine-, chlorine- and/or bromine- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted phenyl, or R<sup>17</sup> and R<sup>18</sup> also together optionally represent C<sub>3</sub>-C<sub>6</sub>-alkanediyl or C<sub>2</sub>-C<sub>5</sub>-oxaalkanediyl, each of which is optionally substituted by C<sub>1</sub>-C<sub>4</sub>-alkyl, phenyl, furyl, a fused benzene ring or by two substituents which, together with the C atom to which they are attached, form a 5- or 6-membered carbocycle,
  - R<sup>19</sup> represents hydrogen, cyano, halogen, or represents in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or phenyl,
  - R<sup>20</sup> represents hydrogen, optionally hydroxyl-, cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or tri(C<sub>1</sub>-C<sub>4</sub>-alkyl)silyl,

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- R<sup>21</sup> represents hydrogen, cyano, halogen, or represents in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or phenyl,
- X<sup>1</sup> represents nitro, cyano, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy,
- X<sup>2</sup> represents hydrogen, cyano, nitro, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy,
  - X³ represents hydrogen, cyano, nitro, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy,

and/or the following compounds, defined by general formulae, of the general formula (IId)

$$O \xrightarrow{R^{23}} (X^5)_v \xrightarrow{R^{22}} (X^4)_l$$
 (IId)

or of the general formula (IIe)

$$R^{25}$$
 $R^{26}$ 
 $R^{22}$ 
 $R^{22}$ 
 $R^{22}$ 
 $R^{22}$ 
 $R^{22}$ 
 $R^{22}$ 
 $R^{22}$ 
 $R^{23}$ 
 $R^{22}$ 
 $R^{24}$ 
 $R^{25}$ 
 $R$ 

where

t represents a number 0, 1, 2, 3, 4 or 5,

v represents a number 0, 1, 2, 3, 4 or 5,

R<sup>22</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl,

R<sup>23</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl,

R<sup>24</sup> represents hydrogen, in each case optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino or di(C<sub>1</sub>-C<sub>4</sub>-alkylamino)

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alkyl)amino, or in each case optionally cyano-, halogen- or  $C_1$ - $C_4$ -alkyl-substituted  $C_3$ - $C_6$ -cycloalkyl,  $C_3$ - $C_6$ -cycloalkyloxy,  $C_3$ - $C_6$ -cycloalkylamino,

R<sup>25</sup> represents hydrogen, optionally cyano-, hydroxyl-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, in each case optionally cyano- or halogen-substituted C<sub>3</sub>-C<sub>6</sub>-alkenyl or C<sub>3</sub>-C<sub>6</sub>-alkynyl, or optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>6</sub>-cycloalkyl,

represents hydrogen, optionally cyano-, hydroxyl-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, in each case optionally cyano- or halogen-substituted C<sub>3</sub>-C<sub>6</sub>-alkenyl or C<sub>3</sub>-C<sub>6</sub>-alkynyl, optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, or optionally nitro-, cyano-, halogen-, C<sub>1</sub>-C<sub>4</sub>-alkyl-, C<sub>1</sub>-C<sub>4</sub>-haloalkyl-, C<sub>1</sub>-C<sub>4</sub>-alkoxy- or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy-substituted phenyl, or together with R<sup>25</sup> represents in each case optionally C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>2</sub>-C<sub>6</sub>-alkanediyl or C<sub>2</sub>-C<sub>5</sub>-oxaalkanediyl,

X<sup>4</sup> represents nitro, cyano, carboxyl, carbamoyl, formyl, sulphamoyl, hydroxyl, amino, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy, and

X<sup>5</sup> represents nitro, cyano, carboxyl, carbamoyl, formyl, sulphamoyl, hydroxyl, amino, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.

13. Compositions according to Claim 12, where the crop plant compatibility-improving compound is selected from the following group of compounds:

cloquintocet-mexyl, fenchlorazole-ethyl, isoxadifen-ethyl, mefenpyr-diethyl, furilazole, fenclorim, cumyluron, dymron or the compounds

$$\begin{array}{c|c} & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

and

- 14. Compositions according to Claim 12 or 13 where the crop plant compatibility-improving compound is cloquintocet-mexyl or mefenpyr-diethyl.
- 5 15. Method for controlling unwanted vegetation, characterized in that a composition according to Claim 12 is allowed to act on the plants or their habitat.
  - 16. Use of a composition according to Claim 12 for controlling unwanted vegetation.